

DNA | Duroline

North America, Inc.



High performance heavy duty friction materials.



Duroline S.A.

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Duroline North America Inc.

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Since 2002

DNA - Duroline North America Formulations



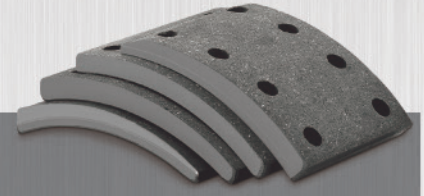
Standard Formulations

A step above your average standard formulation. For normal-duty operations these formulations are a very cost-effective solution for your long and short haul needs.



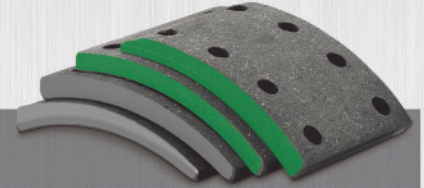
DNA-10 (Grey) – 20.000 lb. GAWR (165 AL)

Comparison: Abex (Federal Mogul) AN6166 – Marathon UB – Frasle AF550 – Stemco Horizon SP-20



DNA-11 (Green) – Rated for 23.000 lb. GAWR (165 AL)

Comparison: Abex (FedMog) AX6149 – Marathon FLOE – Frasle AF556 – Stemco Horizon SP-23



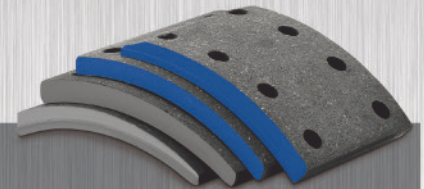
Premium Formulations

Designed to withstand the energy generated in more demanding applications and extend the life of your brakes. These formulations will offer great benefits, including longer brake replacement cycles, low noise levels and improved drum wear.



DNA-18 (Blue) – Rated for 20.000lbs per axle (165 AL)

Comparison: Abex (Fed-Mog) EN6008/EL6011 – Marathon HS20 – Meritor MA210/MA212 – FRASLE AF55 – Stemco Crest XL



DNA-38 (Red) – Rated for 23.000lbs per axle (165 AL)

Comparison: Abex (Fed-Mog) EX685/SDA6098 – Marathon HS – Meritor MA310/MA312 – Frasle AF557 – Stemco Vista HP



DNA-25 (Premium Severe) (Orange) – Rated for 25.000lbs per axle (165 AL)

Comparison: Abex (Fed-Mog) ED6028/EH6040 – Marathon TS – Meritor MA403 – Frasle AF560 – Stemco Vista HP1



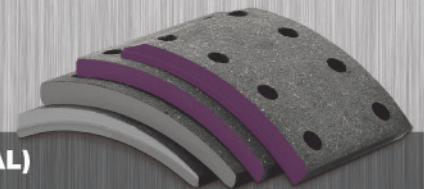
Heavy Duty and Transit

Maximum performance for heavy loads and stop-and-go operations. Outstanding for bus and refuse vocations. DNA-68 is very similar to the old Brake Pro formula CM/CMT22A1, that provided outstanding stopping power, quiet brake applications and extended lining and drum life.



DNA-68 (Purple) – Rated for 23.000lbs per axle (165 AL) and 26.000lbs (210 AL)

Comparison: Abex (Fed-Mog) 685/697 – Marathon KVT/MBST – Meritor R685/687 – Stemco Ultrapeak BRT



Extra Life

Designed to maximize brake replacement cycles. These friction materials are made with the highest manufacturing and technological processes the industry offers. DNA-88 is very similar to the old Brake Pro formula CM24/29, that provided stopping power, quiet brake applications and extended lining and drum life. This is the solution to transit applications with 28,700 GAWR applications and any heavy refuse application that desires the four basics to lower operation costs. Stopping power, Quiet brake applications, Extended lining life and Extended drum life.

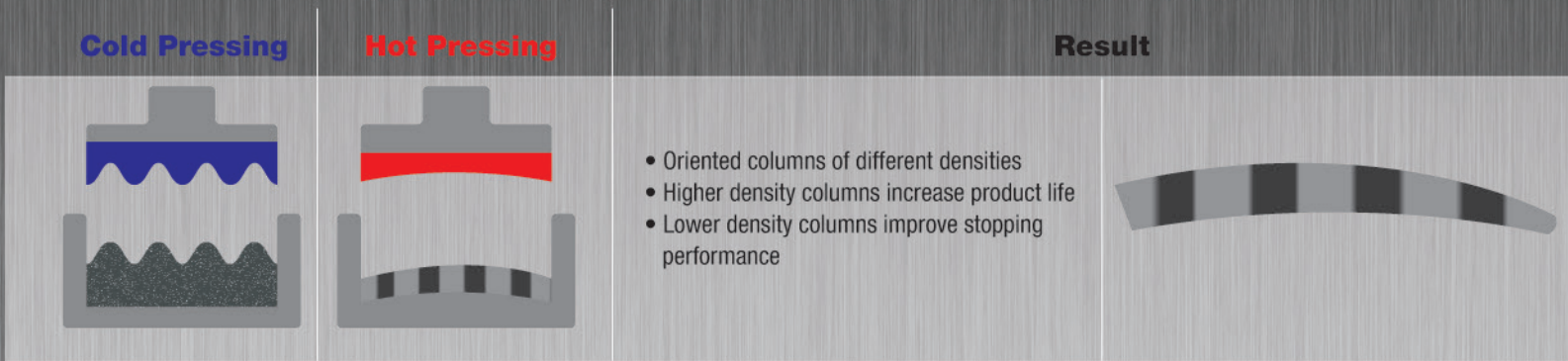


DNA-88 (Gold) – Rated for 26.000lbs per axle (180 AL) and 29.000lbs (210 AL)

Comparison: Stemco Ultrapeak FT



Duoline offers the innovative and exclusive Wave Process - A Patented process of manufacturing brake linings in which different densities are created in the same lining. This exclusive technology allows two otherwise conflicting characteristics of brake products to coexist: the high durability of harder linings with the stable friction coefficient of softer materials.



Wheel Kit Top Mover Reference

Wheel Kit Part No.	Description
DNA-10 - STANDARD 20K	
4515QKDNA10	16.5x7 MERITOR Q
4707QPKDNA10	16.5x7 MERITOR Q+
4709E2KDNA10	16.5x7 EATON ES 2nd GEN
DNA 11 - STANDARD 23K	
4515QKDNA11	16.5x7 MERITOR Q
4707QPKDNA11	16.5x7 MERITOR Q+
4709E2KDNA11	16.5x7 EATON ES 2nd GEN
DNA18 - PREMIUM 20K	
4515QKDNA18	16.5X7 MERITOR Q
4702QPKDNA18	16.5X7 MERITOR Q+
4707QPKDNA18	16.5X7 MERITOR Q+
4709E2KDNA18	16.5X7 EATON ES 2nd GEN
DNA-38 - PREMIUM 23K	
4515QKDNA38	16.5x7 MERITOR Q
4702QPKDNA38	15x4 MERITOR Q+
4707QPKDNA38	16.5x7 MERITOR Q+
4709E2KDNA38	16.5x7 EATON ES 2nd GEN

More formulations and kit applications available from our distribution centers.

New Brake Shoe Kits

- 2 Brake Shoes
- 1 Hardware Kit



Brake Shoe Kit Applications

AXLE RATING	OVER THE ROAD	BUS, REFUSE AND/OUR TRANSIT	HEAVY HAUL AND/OR SPECIALTY
20,000	DNA 10 DNA 18		
23,000	DNA 11 DNA38	DNA38 DNA68	DNA38 DNA68
25,000			DNA25 DNA88
26,000		DNA68	DNA88
29,000		DNA88	DNA88

Note: Table is for reference purpose only. For proper brake lining application, variables such as actual vehicle weight and A/L factor must be considered. For more applications visit our website www.duoline.com.br/en



With over 28 years of experience in the international and Brazilian domestic market, we are recognized worldwide as one of the largest heavy duty friction manufacturers. Duroline uses the most advanced manufacturing techniques, including the patented Wave Process. Based in Caxias do Sul - Brazil and with warehouses in USA, the company has a worldwide presence, exporting to over 50 countries and all continents.

CTT – Duroline Technology and Training Center

Located at Duroline headquarters, CTT has a three-story structure and state of the art equipment, including a dynamometer to perform tests and evaluation of all current and future products.



Duroline S.A. - Brazil – since 1988
Duroline North America, Inc. - USA – since 2002
More than 250 employees.
Production Capacity: 960,000 pieces/month